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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,396	07/24/2003	Jeffrey S. Lille	SJO920020118US1	3023

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EXAMINER

MILLER, BRIAN E

ART UNIT PAPER NUMBER

2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/627,396	Applicant(s) LILLE ET AL.	
	Examiner Brian E. Miller	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) 4,6-8,12 and 14-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,9,11 and 13 is/are rejected.
- 7) ☐ Claim(s) 22 and 23 is/are objected to.
- 8) ☒ Claim(s) 1,3-9 and 11-23 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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Claims 1, 3-9, 11-23 are now pending, with claims 4, 6-8, 12, 14-21 withdrawn from consideration due to a previously set forth restriction requirement/election.

\*In view of applicant's response filed on 3/12/07, the Examiner is subsequently replacing the FINAL Office Action, mailed 1/10/07, with the following FINAL Office action, due to the oversight of newly presented claims filed on 10/20/06.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Kasiraj et al (US 6,493,183). (As per claims 1, 9) Kasiraj et al discloses a magnetic head, as shown mainly in FIGs. 2A-2B, including: a first magnetic pole P1/S2 having a portion thereof that is exposed at an air bearing surface (ABS) of the magnetic head; a second magnetic pole P2 including a pole tip thereof that is exposed at the ABS; a heating element 20 being disposed between the first magnetic pole and the pole tip; an induction coil layer "C" that is disposed between the first magnetic pole P1/S2 and the second magnetic pole P2, as shown in the noted figures (also refer to col. 4, line 35 to col. 5, line 13); wherein the heating element 20 is disposed between the induction coil "C" and the pole tip, such that the heating element 20 is not exposed outside these boundaries. It is noted that with respect to claim 9, the magnetic media 10 (Fig. 1B) is known to

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have the capability to have magnetic bits written thereto as is known in the art. As to the head being a perpendicular type, Kasiraj et al is considered to encompass this type as well (see col. 4, lines 40-46).

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 5, 11 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasiraj et al in view of the applicant's admitted prior art (AAPA), i.e., FIGs. 2 & 3.

For a description of Kasiraj et al, see the rejection, supra. With respect to claims 3 & 11, Kasiraj et al is silent as to the second magnetic pole including a shaping layer that is disposed in magnetic flux communication with the first magnetic pole, and a probe layer which includes the pole tip, wherein the probe layer is disposed in magnetic flux communication with the shaping layer. However, as shown in FIG. 2 of the AAPA (also refer to pages 5-7 of the instant application), the second magnetic layer includes a probe layer 68 with a pole tip 70.

From this teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the single magnetic layer of the second pole to have included two layers, i.e., a shaping layer and a probe layer, as taught by the AAPA.

The motivation would have been: configuring the one layered magnetic pole to have two layers, as discussed above, would have produced a magnetic head with favorable magnetic

characteristics, and a high recording density, as would have been readily realized by a skilled artisan.

*Allowable Subject Matter*

5. Claims 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

6. Applicant's arguments filed 10/20/06 have been fully considered but they are not persuasive.

\*The Examiner has left items A & B as in the first FINAL, i.e., mailed 1/10/07, and has additionally added items C & D, to respond to applicant's AF response filed 3/12/07.

A...Applicant asserts on page 11 of the "REMARKS" that "Kasiraj et al. '183, and particularly Figs. 2B and 5B, it is seen that the heating element 2B (Fig. 2b) and/or 20" (Fig. 5B) is not disposed between the induction coil structure and the second magnetic pole tip (P2). Rather, the heating element 20 and 20" is disposed within the induction coil structure and even apparently beneath the coil turns "C". Therefore, Kasiraj et al. fails to anticipate the limitations of claims 1 and 9 that the heating element is disposed between the induction coil structure and the pole tip. Applicant therefore respectfully submits that amended independent claims 1 and 9 recite limitations that are not taught by the cited prior art."

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In response, the Examiner respectfully disagrees. The key to this argument is what the claim language actually is. Claims 1 and 9 recite “wherein said heating element is disposed between said induction coil structure and said pole tip.” As set forth in the Office Action, it is maintained that Kasiraj et al discloses this feature such that “wherein the heating element 20 is disposed between the induction coil “C” and the pole tip, *such that the heating element 20 is not exposed outside these boundaries.*” It is considered irrelevant how applicant describes where the heating element is located in Kasiraj et al, e.g., beneath coil turns “C”, because the claim language simply does not preclude such a location. The rejection is thus maintained.

**B...**Applicant simply reiterates the above argument for the claims rejected under 103, i.e., 3, 5, 11 & 13, which amounts to a failure to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

The response to this “argument” is also repeated by the Examiner as set forth in (A...), above.

**C...**The Examiner notes that new claims 22-23 were overlooked because applicant did not include these in any remarks or arguments filed on 10/20/06, and they also directly followed previously “withdrawn” claims. While this would have been a non-responsive issue previously, the Examiner has overlooked this and addressed these newly presented claims accordingly, to thereby facilitate a faster prosecution.

**D...**The Examiner would like to respectfully point out that the Examiner was utilizing a *longitudinal* spacing to interpret how the heater element was positioned between two elements, while the applicant was arguing a *vertical* or *thickness* spacing. The newly presented claims, i.e.,

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22-23, overcome the Examiner's longitudinal interpretation, and thus have been indicated as allowable.

*Conclusion*

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

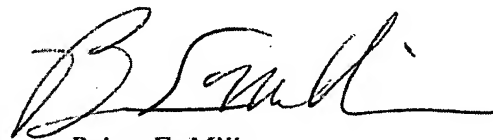
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian E. Miller whose telephone number is (571) 272-7578. The examiner can normally be reached on M-TH 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'B. Miller', with a stylized flourish at the end.

*Brian E. Miller*  
*Primary Examiner*  
*Art Unit 2627*

BEM  
April 5, 2007